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Yılmaz, Gülşe; Nuri İnel, Mehmet

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Assessment of Sustainability Performances of Banks by TOPSIS Method and Balanced Scorecard Approach

Gülşe Yılmaz
Marmara University, İstanbul, 34180, Turkey
E-mail: gulsebulbuloglu@gmail.com
Turkey
Assist. Prof. Mehmet Nuri İnel
Marmara University, İstanbul, 34180, Turkey
E-mail: mninel@marmara.edu.tr
Turkey

Abstract

Today, Norton and Kaplan's Balanced Scorecard (BSC) model is used to improve enterprise performance. The BSC establishes performance targets for the future by identifying current situations in the business performance reports. These targets have been both a strategy and a sustainability tool for companies. Therefore it is needed for the measurement of sustainability performance report sustainability performance of companies. This study sustainability performance balanced scorecard was created for banks. In this context, the economic, environmental, social and institutional profile dimensions of the GRI G4 (Global Reporting Initiative) sustainability reports have been determined. Sustainability dimensions were intersected with the dimensions of the BSC (financial, customer, internal processes, and learning - development dimensions). Thus, BSC model for sustainability has been issued for banks. Banks were examined by TOPSIS method and evaluate their performance with the created model.

Keywords: Sustainability, Balanced Scorecard, Sustainability Balanced Scorecard, Bank's Performance, TOPSIS, Multi-Criteria Decision Making Methods

Introduction

The concept of sustainability has become the most talked about topic today. "Our Common Future" of the Brundtland Commission published in 1987 with the report, sustainability has been influential in almost every field of our lives [1].Different definitions have been made by everyone about the concept of sustainability. Sustainability has found itself in many areas. There are terminological uses such as sustainable development, sustainable agriculture, sustainable cities, sustainable economy, sustainable architecture, and sustainable growth [2].This term is also an indication that sustainability is a common expression among sectors. For companies, "corporate sustainability" is especially important. Corporate sustainability refers not only to economic sustainability but also to social and environmental sustainability. Sustainability reports have become widespread with the inclusion of social and environmental issues. Companies share their sustainability activities in public with these reports. Published sustainability reports are generally in the GRI(Global Reporting Initiative) format. Performance indicators set by the GRI in the formation of reports play a key role. These indicators have brought an international perspective to measurement and evaluation.

For companies, Norton and Kaplan's BSC model is gaining importance in terms of strategy generation, protect position and sustainability. There are four dimensions in BSC. These are financial, customer, internal processes, learning and development dimensions. [3].The pressure to compete with the transition process to the fourth of industry has increased. With the impact of competitive pressures and innovation, companies have opted to use all their resources in the best possible way and make decisions in this direction. Critical decision-making techniques have been applied to minimize the subjective approach of decision-making processes and

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to make the right decisions. It is aimed to choose the best alternative to the determined criteria. In the decision-making processes, the criteria are assessed in a holistic and simultaneous manner by considering more than one qualitative or quantitative criterion. Thus, the criterions that are very close to each other are objectively examined[4].

In this study, sustainability dimensions and balanced scorecard dimensions were intersected. Thus, a sustainability-balanced scorecard model was established. The generated model was evaluated by TOPSIS method from multi-criteria decision-making methods.Companies that publish a sustainability report in 2015 and 2016 were analyzed. Companies with sustainability report are grouped by sector. The companies that are selected from the banking sector have been evaluated. Sustainability report data of seven companies for 2015 and six companies for 2016, which are included in the banking sector and published sustainability reports, have been examined. Twenty key performance indicators, which are common to each company, were selected from the indicators included in the sustainability reports. Selected performance indicators were evaluated by TOPSIS method.

Literature Review

Most general definitions of sustainability are the protection of today's resources for the future. For companies, corporate sustainability concept comes to the forefront. Institutional sustainability refers not only to the economy but also to the management of social and environmental factors integrated with corporate governance principles. Institutional sustainability is the efficient use of the environmental, economic and social resources of the institution [5].The environmental, economic and social sustainability of business activities should also support the entity's purpose of existence [6].Institutions should not see sustainability practices as a burden. So they will achieve success [7].

The most widely used tool for performance measurement is the balanced scorecard. BSC developed by Kaplan and Norton. BSC has been adopted as a performance management tool in all sectors. It provides an easy and understandable standard that is appropriate for achieving the aims and objectives of organizations. It adopts in-house governance. This ensures that the day-to-day operations of the organization are in the strategy focus [8].The BSC has four dimensions. These are the financial dimension, customer dimension, Inner processes dimension and the dimension of learning and development.

According to Norton and Kaplan, the most widespread work that created sustainability as a model with "Balanced Performance Carnets" was uncovered by White in 2005. In White's work, economic, environmental and social sustainability factors and the four dimensions of BSC, financial, customer, internal processes, learning and development approaches, have been intersected. White reviewed the main headings of the economic, environmental and social dimensions of the GRI reporting format and the four dimensions of the BSC and made general judgments [9].The work of White and others is interpreted by Özçelik in 2013. In Özçelik's study, sustainability has examined the formation process of performance cares [10]. Yılmaz and İnel intersected BSC dimensions with sustainability dimensions. They created a model in their work. The created model was intuitive and comprehensive.The indicators related to sustainability in the model were taken from the GRI G4 report framework.110 GRI indicators were used in the model. [11]

Sustainability performance scorecard is divided into 3 basic steps by Figge et al. The first step is the selection of strategic business units. The second is to determine the environmental and social aspects. The third is to determine the suitability of social and environmental aspects for business unit strategy [12].

Performance models need to be evaluated systematically. Companies in the same sector are needed an evaluation tool to see their place in the sector. In this study, the sustainability performances of the enterprises in the banking sector are examined. In the performance evaluations of the banks, it has been seen that the methods of multi-criteria decision making are frequently used. Asgari and Darestani investigated the use of multi-criteria decision-making methods in the analysis of the BSC. This analysis was done by literature research. TOPSIS, AHP and ANP methods have been frequently used in multi-criterion decision-making methods for BSC evaluation [13].

Sakarya and Aytekin used the Prometheus method as a very criterion-determining method in

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measuring the relationship between the performances of deposit banks traded in the ISE and the share certificates [14]. Caliskan and Eren evaluated the performances of the banks with AHP and Promethee methods from many criteria decision-making methods [15]. Ömürbek, Aksoy, and Akçakanat evaluated the sustainability performances of banks with Aras, Moosra and Copras [16].Özkan analyzed the performance of publicly traded and publicly traded commercial banks in Turkey by using the Topsis method [17].

Yıldırım and Demirci evaluated the bank performances with Topsis method. They set the benchmark set to be used in evaluating the financial performance of 10 banks. These criteria were determined by the important financial ratios used in the literature. There are 32 criteria in the study, and these criterion weights are considered to be equal [18].

Timor and Mimarbaşı analyzed bank branch service activities with Data Envelopment Analysis and Topsis methods [19].Between 2004 and 2014, Kandemir and Karataş examined the financial performance of commercial banks with multi-criteria decision-making methods. In the study, the banks traded on the Stock Exchange Istanbul were used. Gray Relational Analysis, Topics, and Vikor analysis methods were used in multi-criteria decision-making methods.12 deposit banks were used in the study. The result of each method was different [20].

Chaudhuri and Ghosh assessed the performances of banks in India with Topsis from Multi-Criteria Decision Making methods[21].Jiang and Liu used multi-criteria decision making in commercial bank performance evaluations [22].Wanke et al. Used the Topsis method to measure productivity in Angolan banks[23].Çetin evaluated the performance of the banks with the Vikor method [24].Mandic and others used fuzzy AHP and Topsis methods to measure the financial performance of Serbian banks[25].Dadzie and Turkson used the Topsis methodology to measure the sustainability performance of European Banks between 2008 and 2013 [26].Ru Wu et al. analyzed the performance of banks using the ANP method using a balanced performance grid (BSC) approach [27].

Aras et al. compared corporate sustainability performances in traditional banking and participation banking with the method of Topsis. The sustainability reports of all the banks that published the sustainability report in Turkey in 2013 were examined in the study and all the statements in the sustainability reports were digitized by content analysis. The sustainability performances of the banks were evaluated by the TOPSIS method with the digitization, [28].

Dinçer and others have evaluated the performance of the Turkish Banking Sector with the BSC approach and analyzed their performance using the ANP method [29].Performance of Turkish banks was evaluated by VIKOR method by Tezergil [30]. The financial performance of participation banks in Turkey by Esmer and Bağcı is evaluated by TOPSIS method[31]. Tsai and Chang used the AHP and VIKOR method in the performance evaluations of banks after the financial crisis [32]. Hung and others ranked the performances of banks based on BSC with TOPSIS. They set the ranking criteria with fuzzy AHP[33]. Seçme and others evaluated the performance of the Turkish Banks with AHP and TOPSIS methods[34]. Bozdoğan and others evaluated the performances of banks with AHP [35].

In the literature, researchers have often used the TOPSIS method for performance evaluation. This method is the upper order placement of those closest to the ideal value, in order to provide the reasons for the alternative ordering of the financial performance to provide more optimal solutions [36].The two major advantages of the TOPSIS method for the decision maker are the ability to evaluate both alternatives, both best and worst, and to easily set up and solve mathematical models with simple computational methods [37].

The name TOPSIS is an abbreviation of "Technique for Order Preference by Similarity to Ideal Solution". The method is based on the choice of the nearest alternative to a positive ideal solution [38].The TOPSIS method was introduced by Hwang and Yoon in 1981.The decision problem with the alternative number n, criterion m is denoted by n points in them-dimensional space. In the method, there are ideal and negative ideal solution points. The alternative is "n" number. The criterion is "m" number. The decision set can be represented by "n" points in "m" dimensional space. The alternative in the method is to make assumptions as the closest

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distance to the ideal solution point and the farthest distance to the negative ideal solution point. The best solution is the closest solution to the positive ideal solution point [39].

Methodology

In this study, the enterprises that published the sustainability report in 2015 and 2016 were examined. Enterprises with a sustainability report were grouped into sectors. Sustainability reports have been found widespread in the banking sector. For this reason, the banks that published the sustainability report in the GRI G4 standard were examined.7 banks in 2015, 6 banks in 2016 were taken into consideration.

The indicators that banks have published in their sustainability reports have been analyzed .20 benchmarks of sustainability for all banks were set up and a model of the bank's special sustainability performance was established. Sustainability performance of banks was evaluated with TOPSIS among multi-criteria decision-making methods. The TOPSIS method was included in literature a considerable number of studies on performance. For this reason, TOPSIS method is preferred. The stages of this study:

• Review of GRI G4 sustainability report guidelines,

• Review of GRI G4 report and publish,

• Review of businesses that publish a sustainability report,

• The selection of the banking sector for sustainability performance appraisal,

• Review of the sustainability reports of the banks that publish the sustainability report,

•Establishment of the "Sustainability Performance Scorecard Model" established with sustainability indicators common to banks,

•Assessment of the sustainability performance of banks with TOPSIS among multi-criteria decision-making methods.

Model

Sustainability reports for the years 2015 and 2016 of the banks are examined. Some of the indicators that measure sustainability performance for banks were taken from the GRI G4 report. Special indicators in the model are sector specific indicators of the banks. Some of the indicators were taken from the GRI G4 report. Specific indicators in the model were sector specific indicators common to banks. Table 1 is sustainability performance model for banks.

Table 1.Banks Sustainability Performance Scorecard Model

Sustainability Area		Indicator Code	Indicator Name	BSC Area
economic	Economic Performance	G4-EC2	Net Profit, TL	Financial
		G4-EC2	Total Active, TL	Financial
		G4-EC4	Credits, TL	Financial
		G4-EC2	Deposit, TL	Financial
		G4-EC2	Equity, TL	Financial
		Special	Capital Adequacy Ratio,%	Financial
		Special	Rate Of Low Credits,%	Financial
Environmental	Energy	G4-EN3	Internal Electricity Consumption, Mwh	Processes
		Special	Loan Amount For Renewable Energy, Million USD	Financial
	Water	G4-EN10	Water Consumption (M3 / Year)	Processes
	Emission	G4-EN18	Carbon Footprint, Ton	Processes
	Wastes	G4-EN23	Recycled Paper Amount, Ton	Processes
Social	Decent Work for Humanity	G4-LA9	Average Training Time Per Employee, Hour	Learning
		G4-LA12	Average Age Of Employees, Number	Learning
Corporate	Corporate Profile	G4-9	Total Number of Employees, Person	Learning
		Special	Total Number of Branches, Number	Customer
		Special	Number of ATM, Number	Customer
		Special	Number of Customers Using Internet Banking, Person	Customer
		Special	Number of Mobile Banking Active Customers	Customer
		Special	Number of Disabled Friendly ATM, Number	Customer

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The model was also intersected with the BSC's four dimensions. At the intersection of BSC and sustainability dimensions:

• Traditional financial measures in financial terms,

• From the customer's point of view, the company's value-creation process and non-financial measures,

• Operational efficiency and efficiency measures of company activities in terms of processes,

• On the level of learning and development, the focus is on creating organizational values through innovative applications.

Limitations of Model

There are differences in the indicators that banks declare in their sustainability reports. For example; a bank has set the training hour for distance education as an indicator, while the other bank has set the number of personnel for distance education as an indicator. For this reason, common indicators for all banks are taken into account in the same measurement units. One development bank issuing the sustainability report was not assessed due to scale differences.

Assessment of Sustainability Performances of Banks by TOPSIS Method

In this study, the sustainability performances of the banks were evaluated by the TOPSIS method among the multi-criteria decision-making methods. In the literature, the TOPSIS method is used in the study because the TOPSIS method is highly preferred in performance evaluations. The TOPSIS method consists of six steps. These steps are creating the decision matrix, creating the standard decision matrix, creating the weighted standard decision matrix, creating ideal A* and negative ideal A- solutions, calculation of the distinction and calculation of ideal solving relative proximity [40][41].

Sustainability performance of 7 Turkish Banks in 2015 and 6 Turkish Banks in 2016 was evaluated by TOPSIS method. The names of the banks were indicated by symbols. Banks' 2015 sustainability assessments are calculated by TOPSIS between Table 2 and Table 9. Table 2 shows the criteria codes in TOPISIS.

Table2. Coding of Criteria Used

Code	Criterion Name
1	Net Profit, TL
2	Total Active, TL
3	Credits, TL
4	Deposit, TL
5	Equity, TL
6	Capital Adequacy Ratio,%
7	Rate Of Low Credits,%
8*	Internal Electricity Consumption, Mwh
9	Loan Amount For Renewable Energy, Million USD
10*	Water Consumption (M3 / Year)
11*	Carbon Footprint, Ton
12	Recycled Paper Amount, Ton
13	Average Training Time Per Employee, Hour
14*	Average Age Of Employees, Number
15	Total Number of Employees, Person
16	Total Number of Branches, Number
17	Number of ATM, Number
18	Number of Customers Using Internet Banking, Person
19	Number of Mobile Banking Active Customers
20	Number of Disabled Friendly ATM, Number

*Declining indicators

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Table 3 and Table 4 show the decision matrix for the performance of the banks.

Table3.Decision Matrix (2015)

BANKS	ECONOMIC						
	Economic Performance						
Criterions	1	2	3	4	5	6	7
A Bank	3.229.000.000	252.467.000.000	153.466.000.000	149.470.000.000	28.015.000.000	14.50	2.20
B Bank	3.615.114.000	279.600.000.000	220.700.000.000	156.100.000.000	31.200.000.000	13.50	3.20
C Bank	3.083.000.000	275.718.000.000	177.037.000.000	153.802.000.000	32.035.000.000	15.60	2.00
D Bank	1.909.000.000	235.300.000.000	152.500.000.000	130.000.000.000	23.086.402.000	13.80	3.90
E Bank	2.315.000.000	187.729.000.000	126.745.000.000	122.146.000.000	19.424.000.000	13.80	3.06
F Bank	1.930.000.000	182.947.000.000	122.974.000.000	109.923.000.000	16.768.000.000	14.50	3.80
G Bank	5.162.000.000	302.848.000.000	186.813.000.000	186.469.000.000	31.546.000.000	15.08	1.7

Table4.Continuation of Decision Matrix (2015)

BANKS	ENVIRONMENTAL					SOCIAL		CORPORATE					
	Energy		Water	Emission	Wastes	Decent Work for Humanity		Corporate Profile					
Criterions	8	9	10	11	12	13	14	15	16	17	18	19	20
A Bank	324,416	1,024	146,489	54,996	635	47.94	34.2	14,050	902	4,150	17.000.000	12.000.000	2,075
B Bank	115,693	4,000	270,000	78,333	1800	44	32.9	19,692	983	4,504	3.982.065	2.504.845	602
C Bank	34,913	810	128,765	23,230	516.8	24.65	31.6	25,157	1,377	6,596	2.500.000	2.400.000	2,300
D Bank	125,217	3,600	266,144	86,863	1,033	46.01	28.75	18,802	1,000	4,332	2.600.000	1.500.000	2,144
E Bank	64,190	1,450	448,269	71,072	34,272	77.04	30.28	17,104	951	3,585	925,000	2.400.000	343
F Bank	59,950	1,357	235,191	26,070	241	31.4	33.5	15,324	920	3,576	1.745.000	684,000	1,007
G Bank	66,522	2,040	77,075	10,896	1,310	22.97	34.5	25,697	1,812	6,573	6.300.000	1.030.000	670

Table 5shows the scoring of priority matrices of banks. D and E banks have no prioritization matrix in their sustainability reports.

Table5.Banks Prioritization Matrix Scoring

Bank A		
Category	**Point**	**Prioritization Matrix Field**
Corporate	6	Corporate Governance
Environmental	5	Carbon Emission
Economic	4	Financial Performance
Social	3	Customer focused
Social	2	Career Development and Education
Environmental	1	Wastes
Bank B		
Economic	6	Financial Performance
Corporate	5	Corporate Governance
Environmental	4	Carbon Emission
Environmental	3	Water
Social	2	Customer focused
Social	1	Career Development and Education

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Bank C		
Economic	5	Financial Performance
Corporate	4	Corporate Governance
Social	3	Customer focused
Environmental	2	Carbon Emission
Environmental	1	Energy
Bank F		
Economic	6	Financial Performance
Social	5	Customer focused
Social	4	Corporate Governance
Environmental	3	Carbon Emission
Environmental	2	Wastes
Social	1	Customer focused
Bank G		
Corporate	5	Corporate Governance
Economic	4	Financial Performance
Environmental	3	Renewable energy
Environmental	2	Wastes
Environmental	1	Energy
Total	**93 Points**	

The criterion coefficients in the weighting are matched and scored with sub-dimensions from the priority matrices. Thus, weighting is determined by associating with criteria (indicators).Indicators with the same indicator sub domain are considered equal weight. Table 6shows the weight of the criteria.

Table6.Weighting by Prioritization Matrix (W_i)

Area	Subspace	Indicator	Indicator Type	Indicators / Areas	Weight
Economic	Financial Performance	Net Profit, TL	Growing	Financial Performance	0.0384
Economic	Financial Performance	Total Active, TL	Growing	Financial Performance	0.0384
Economic	Financial Performance	Credits, TL	Growing	Financial Performance	0.0384
Economic	Financial Performance	Deposit, TL	Growing	Financial Performance	0.0384
Economic	Financial Performance	Equity, TL	Growing	Financial Performance	0.0384
Economic	Financial Performance	Capital Adequacy Ratio,%	Growing	Financial Performance	0.0384
Economic	Financial Performance	Rate of Low Credits,%	Growing	Financial Performance	0.0384

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Environmental	Energy	Loan Amount for Renewable Energy, Million USD	Growing	Renewable energy	0.0323
Environmental	Wastes	Recycled Paper Amount, Ton	Growing	Wastes	0.0538
Social	Decent Work for Humanity	Average Training Time per Employee, Hour	Growing	Career Development and Education	0.0323
Corporate	Corporate Profile	Total Number of Employees, Person	Growing	Corporate Governance	0.0516
Corporate	Corporate Profile	Total Number of Branches, Number	Growing	Corporate Governance	0.0516
Corporate	Corporate Profile	Number of ATM, Number	Growing	Corporate Governance	0.0516
Corporate	Corporate Profile	Number of Customers Using Internet Banking, Person	Growing	Customer focused	0.0753
Corporate	Corporate Profile	Mobile Banking Number of Active Clients, Person	Growing	Customer focused	0.0753
Corporate	Corporate Profile	Number of Disabled Friendly ATMs	Growing	Corporate Governance	0.0516
Environmental	Energy	Internal Electricity Consumption, MWh	Decreasing	Electricity	0.0215
Environmental	Water	Water Consumption, m3 / year	Decreasing	Water	0.0323
Environmental	Emission	Carbon Footprint, Ton	Decreasing	Carbon Emission	0.1505
Social	Decent Work for Humanity	Average age of employees	Decreasing	Corporate Governance	0.0516
TOTAL					**1**

Bank sustainability performance was assessed in Table *7* in 2015.

Table7.2015 TOPSIS Review

BANKS	Si^*	Si^-	Ci^*
A Bank	0.077000732	0.101525208	0.568686029
B Bank	0.117553559	0.034824599	0.228540621
C Bank	0.100607118	0.075815114	0.429736737
D Bank	0.127302806	0.035320725	0.217193201
E Bank	0.112660451	0.060674119	0.350040496
F Bank	0.112698471	0.064468974	0.36388725
G Bank	0.097287865	0.087350182	0.473088745

Sustainability data for the year 2016 are also calculated in the same way. Since G Bank has not published sustainability report in 2016, it has not been included in the calculation. Bank sustainability performance was assessed in Table 8 in 2016.

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Table8. 2016 TOPSIS Review

BANKS	Si^*	Si^-	Ci^*
A Bank	0.084776802	0.111680443	0.568472001
B Bank	0.128647608	0.047740373	0.270655478
C Bank	0.106273917	0.084119275	0.441818712
D Bank	0.143244472	0.038557375	0.212084617
E Bank	0.102873483	0.11795731	0.534152454
F Bank	0.113486	0.075356973	0.399045682

Sustainability rankings of banks for the years 2015 and 2016 according to the TOPSIS method are listed in Table 9.The bank closest to Ci value 1 has better performance.

Table9.Sustainability Performance Rankings of Banks for 2015 and 2016

Year 2015		
Ranking	**Banks**	**Ci^***
1.	A Bank	0.57
2.	G Bank	0.47
3.	C Bank	0.43
4.	F Bank	0.36
5.	E Bank	0.35
6.	B Bank	0.23
7.	D Bank	0.22
Year 2016		
Ranking	**Banks**	**Ci^***
1.	A Bank	0.57
2.	E Bank	0.53
3.	C Bank	0.44
4.	F Bank	0.40
5.	B Bank	0.27
6.	D Bank	0.21

The bank with the best sustainability performance according to Table 9 is Bank A for both 2015 and 2016. Bank G was in second place in 2015 and was not listed in 2016 because it did not publish its sustainability report in 2016. C and F Bank maintained their third and fourth places respectively in 2015 and 2016 respectively. While E Bank ranks 5th in 2015, it made a big leap in 2016 and settled in the 2nd row. B and D Bank ranked in the last two places in both the years 2015 and 2016.

Results and Discussion

In this study, a model specific to the banking sector was designed. According to the designed model, 20 indicators specific to the banking sector were determined. According to the sustainability performance scorecard for the banking sector, the16 indicators were followed by the increasing trend and 4 indicators were observed with the decreasing trend. Sustainability performance frame designed for banks is explained in Figure 1 and Figure 2.

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Figure 1. ***Distribution of Sustainability Indicators in BSC Dimensions (Banks), %***

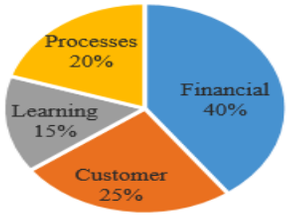
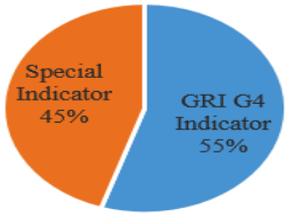


Figure 2. ***Banking Specific Sustainability Performance Scorecard Indicator Resources***



According to Figure 2; the approach that stands out in banks' sustainability performance scales seems to be financed. The financial dimension follows the customer, processes and learning dimensions, respectively. This is based on the fact that the banking sector is financially and customer-based. The sources of the indicators for the bank-specific sustainability performance curve according to Figure 1 have been examined. 55% of the indicator sources are GRI G4 indicators, while 45% are sector-specific indicators generated by banks in their sustainability reports.

Sustainability performances of the banks and the created model were evaluated by TOPSIS among multi-criteria decision-making methods. In the literature, TOPSIS is preferred because of the frequent use of the TOPSIS method in performance evaluations. Since our model has increasing and decreasing indications, the calculation of ideal and negative values in the TOPSIS method allows for an optimal performance ranking.

For the years 2015 and 2016, calculations were made with separate mathematical models. Bank A ranks first in terms of sustainability in 2015 and 2016. The last two rows share B and D Banks. Since Bank G did not publish its sustainability report in 2016, it was not included in the calculation for 2016. G Bank is second in sustainability performance in 2015. The big leap was experienced in E Bank. While e Bank ranked fifth in 2015 and settled in second place in 2016. Indicators of this success; a significant increase in the amount of credit for renewable energy and the reduction amount of paper and water consumption.

Conclusions

Today, sustainability has become a popular topic. Sustainability is to maintain continuity by maintaining the current position with the most general definition. A key sustainability concept for businesses is corporate sustainability. Corporate sustainability not only includes economic sustainability, but also social and environmental sustainability. In this framework, it tries to realize the necessary activities to ensure the sustainability of the enterprises. These activities are economic, environmental and social activities. Recently, businesses have started to publish sustainability reports to share their sustainability activities with the public. Thus, they are informed both by the sustainability reports and by the stock market's sustainability index. However, performance criteria must be taken into consideration to ensure sustainability.

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In this study, a bank-specific sustainability performance report model was established. The starting point of the sustainability performance report model is to provide traceability of the sustainability activities of the institutions in terms of indicators. Each sector has a different focal point, and therefore each sector-specific sustainability performance report model can be prepared. There will be differences in the areas that will be highlighted in the performance report card models created. For example; while the financial dimension is not a priority in a non-governmental organization, the financial dimension for a holding can come to the forefront. The model can be developed for other sectors.

A bank-specific model was set up for sustainability performance assessments of banks in 2015 and 2016. TOPSIS was applied in performance evaluation. The model can be used by the decision maker during different stages of installation. If different indicators are used, different sustainability performance evaluations will emerge. The indicators in the model are the indicators shared by the banks. Especially, the indicators which are published by all banks and which are data are preferred. The differentiation of the indicators will also cause a difference in the performance order. The model is open to development and can be viewed from different perspectives. Different methods (expert opinions, group interviews, extensive research, etc.) can be used to develop the model.

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